

ATTN: 635/8007

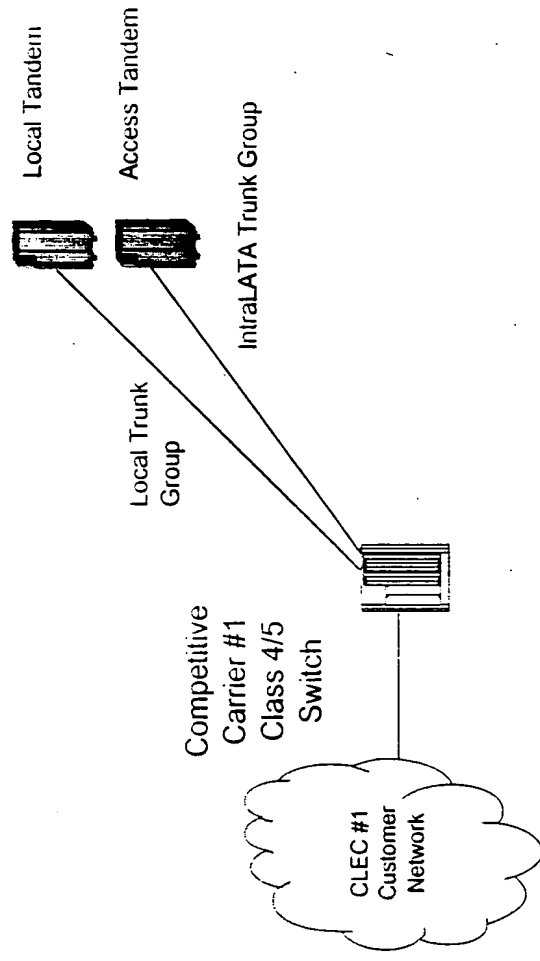
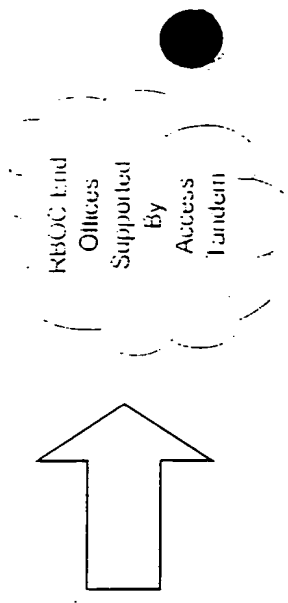
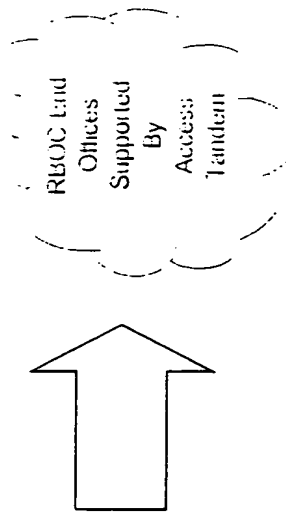


FIGURE 1A

PRIOR ART

2025 RELEASE UNDER E.O. 14176



Combined Local and Access Tandem



Separate Trunks for Local/IntraLATA
and InterLATA (Trunk Group 2 traffic)

Competitive
Carrier #1
Class 4/5
Switch

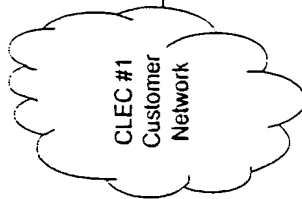


FIGURE 1B

Prior Art

20250525/2007

Ameritech LATA 357 Tandem Trunk Group 1 Requirements

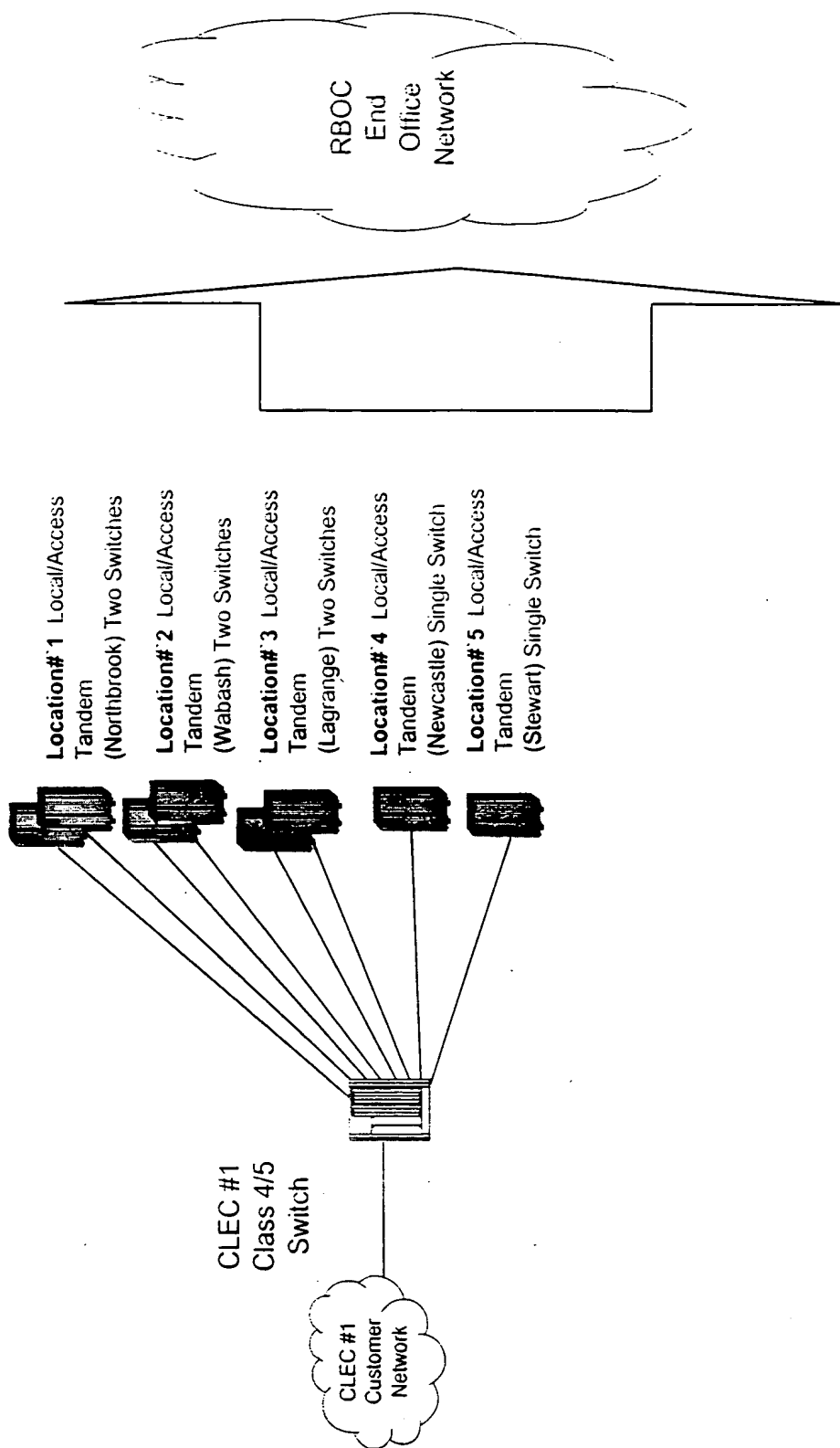
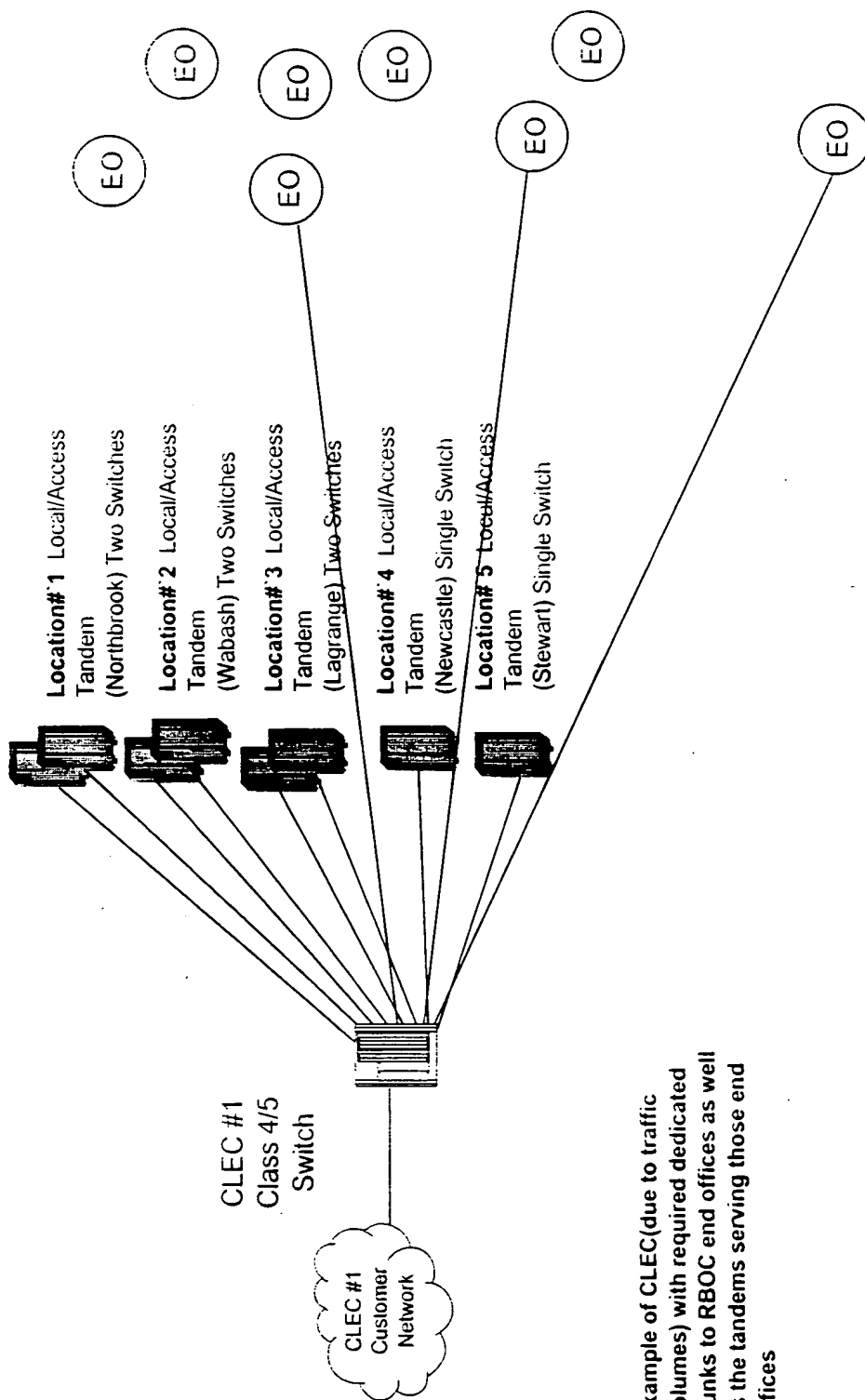


FIGURE 2

Prior Art

207850-535/3007

Ameritech LATA 357 Tandem Trunk Group 1 Requirements



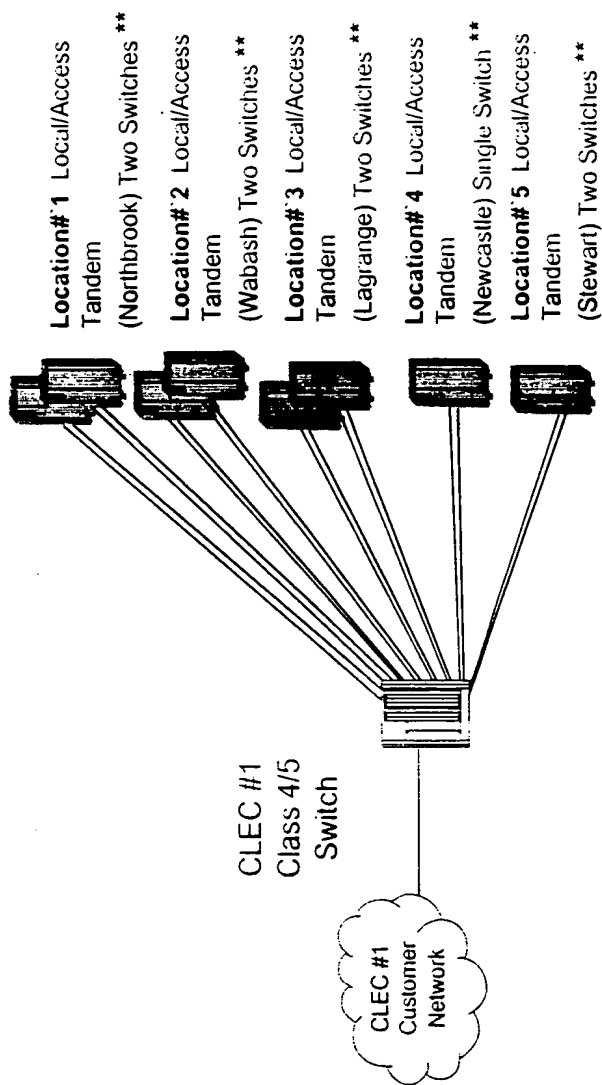
Example of CLEC (due to traffic volumes) with required dedicated trunks to RBOC end offices as well as the tandems serving those end offices

FIGURE 3

Prior Art

207050-835/8801

Ameritech LATA 357 Tandem Trunk Group 2 Requirements



** Each Combined Local/Access Tandem requires two trunk types: Local/IntraLATA and InterLATA

FIGURE 4

Prior Art

201050 "535/800"

Ameritech LATA 357 Tandem Trunk Group 3 Requirements

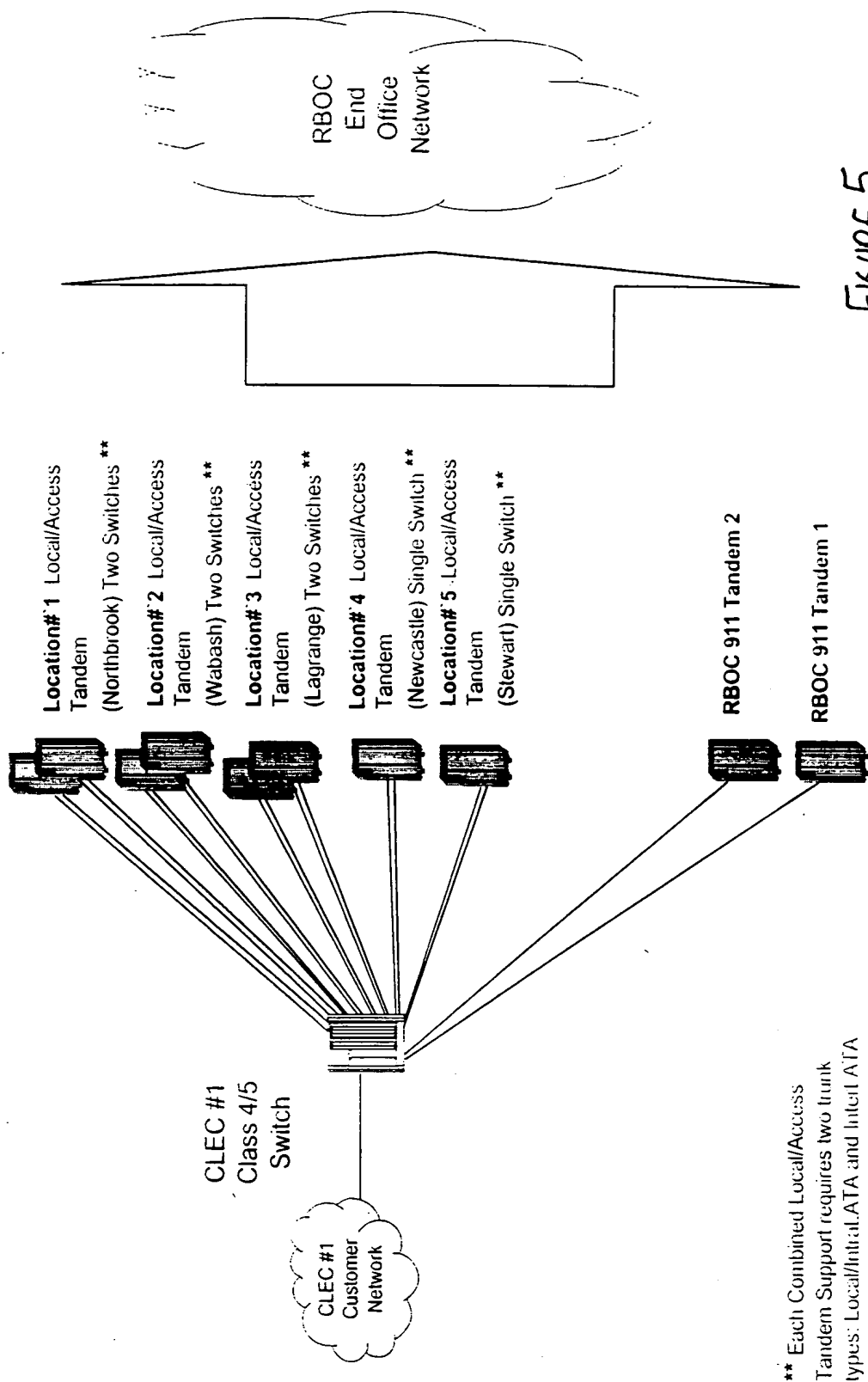
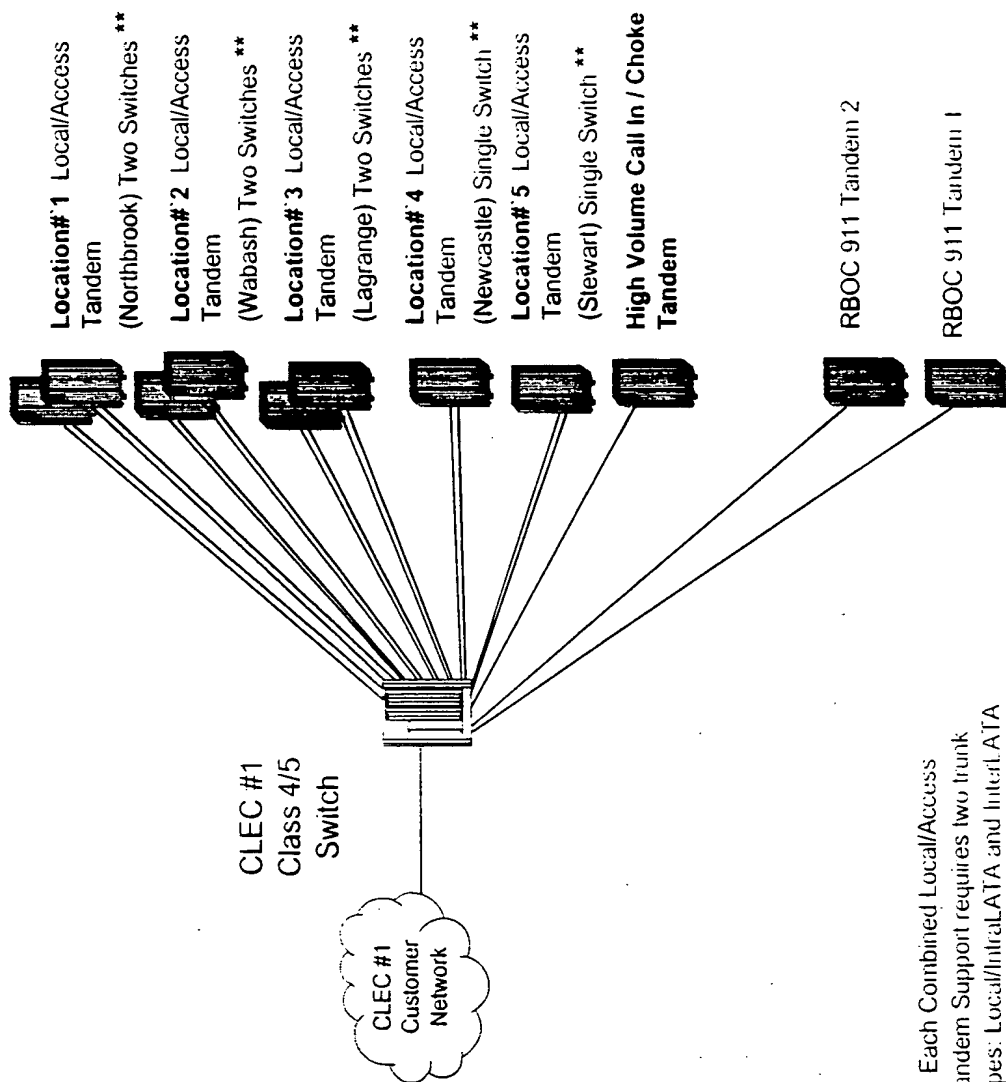


FIGURE 5

PRIOR ART

307050 "535/800"

Ameritech LATA 357 Tandem Trunk Group 4 Requirements



** Each Combined Local/Access
Tandem Support requires two trunk
types: Local/IntraLATA and InterLATA

FIGURE 6

PRIOR ART

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Ameritech LATA 357 Tandem Trunk Group 5 Requirements

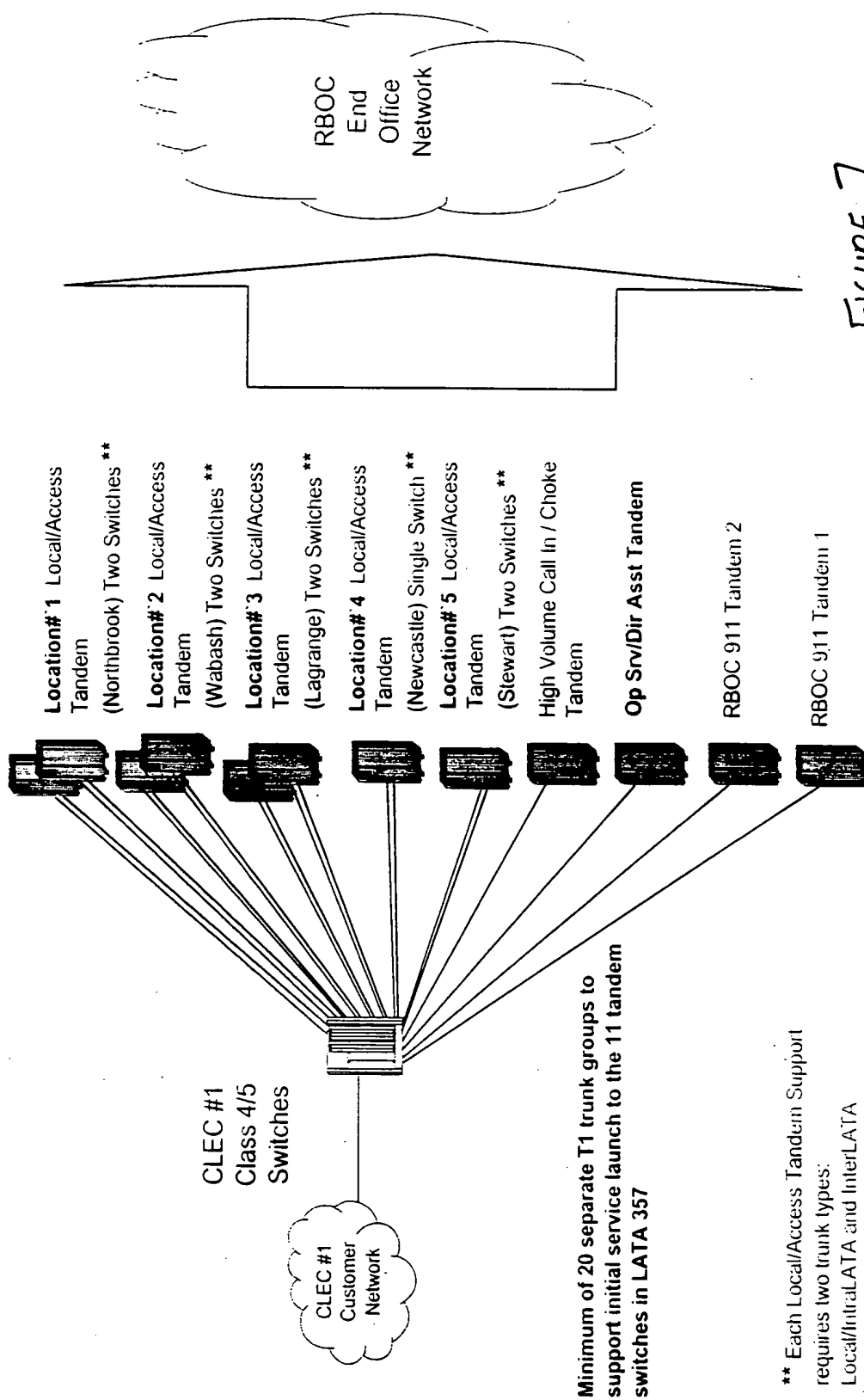


FIGURE 7

Prior Art

Port Costs: Transporting to various Tandem Switches requires

Trunk groups to be managed by Port Costs:

DS1, DS3, STS-1

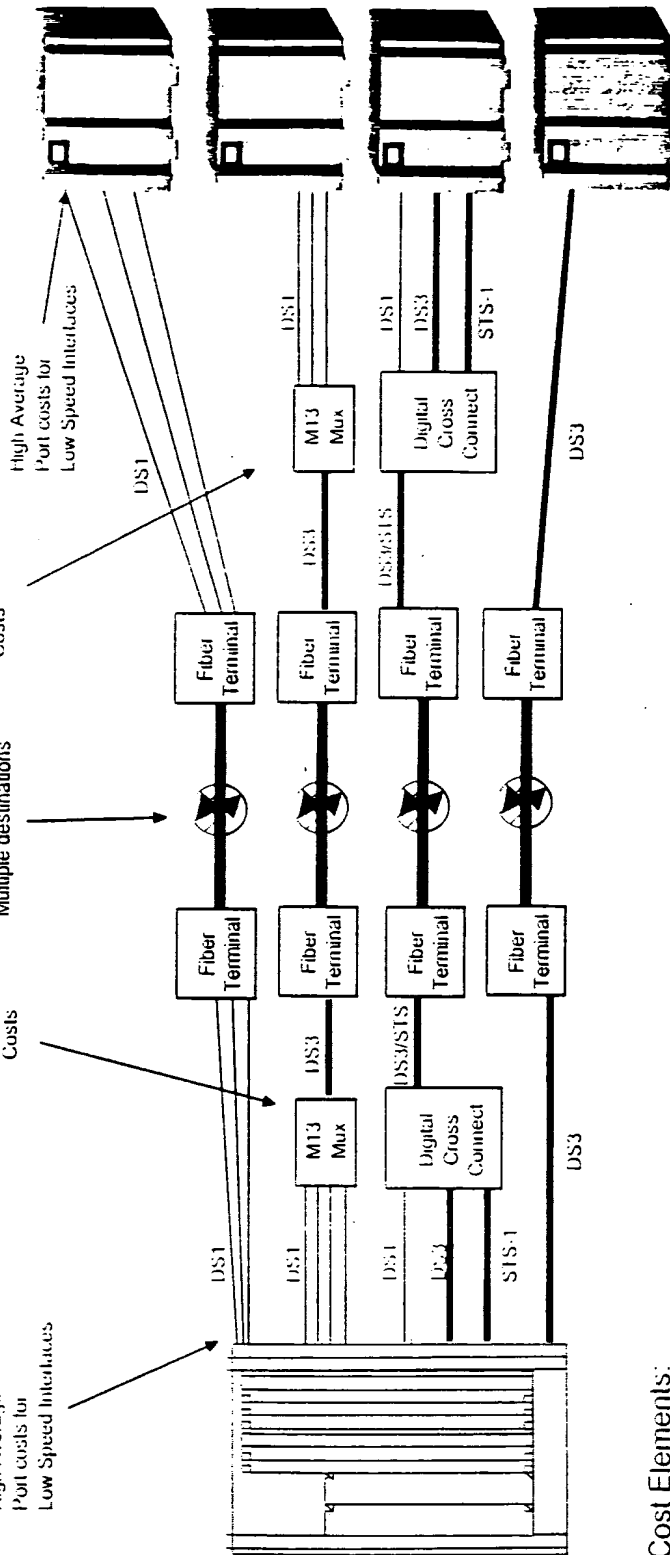
High Average:
Port costs for
Low Speed Interfaces

Mux/DCS
Costs

Transport
Costs to
Multiple destinations

Mux/DCS
Costs

RBOC Tandems are circuit switches which require on most occasions, DS1s for trunk termination. In some situations, larger DS3s terminations may be offered.



Cost Elements:

- Port Costs. DS1s are used for both the Carrier and the RBOC Tandem when call volume to the Tandem does not justify a DS3, and will not grow past a couple of T1s (e.g. E911, OP/DA, Choke)
- DS3s are the primary interface used for the Carrier when high volume Tandem traffic (Local, IntraLATA, InterLATA) is planned. However, M13 muxes or DCS systems are necessary at the RBOC Tandem CO to allow for managed growth of the Tandem switch ports to reduce the DS3s to 1:1s.
- Trunk groups are transported via owned, RBOC leased or third party leased fiber facilities
- Complexity of Planning requires additional $\$2,500/\text{port}$, low fill rate of transport, multiple transport elements, network monitoring, provisioning

FIGURE 8

Prior Art

Ameritech LATA 357 Tandem Trunking Requirements

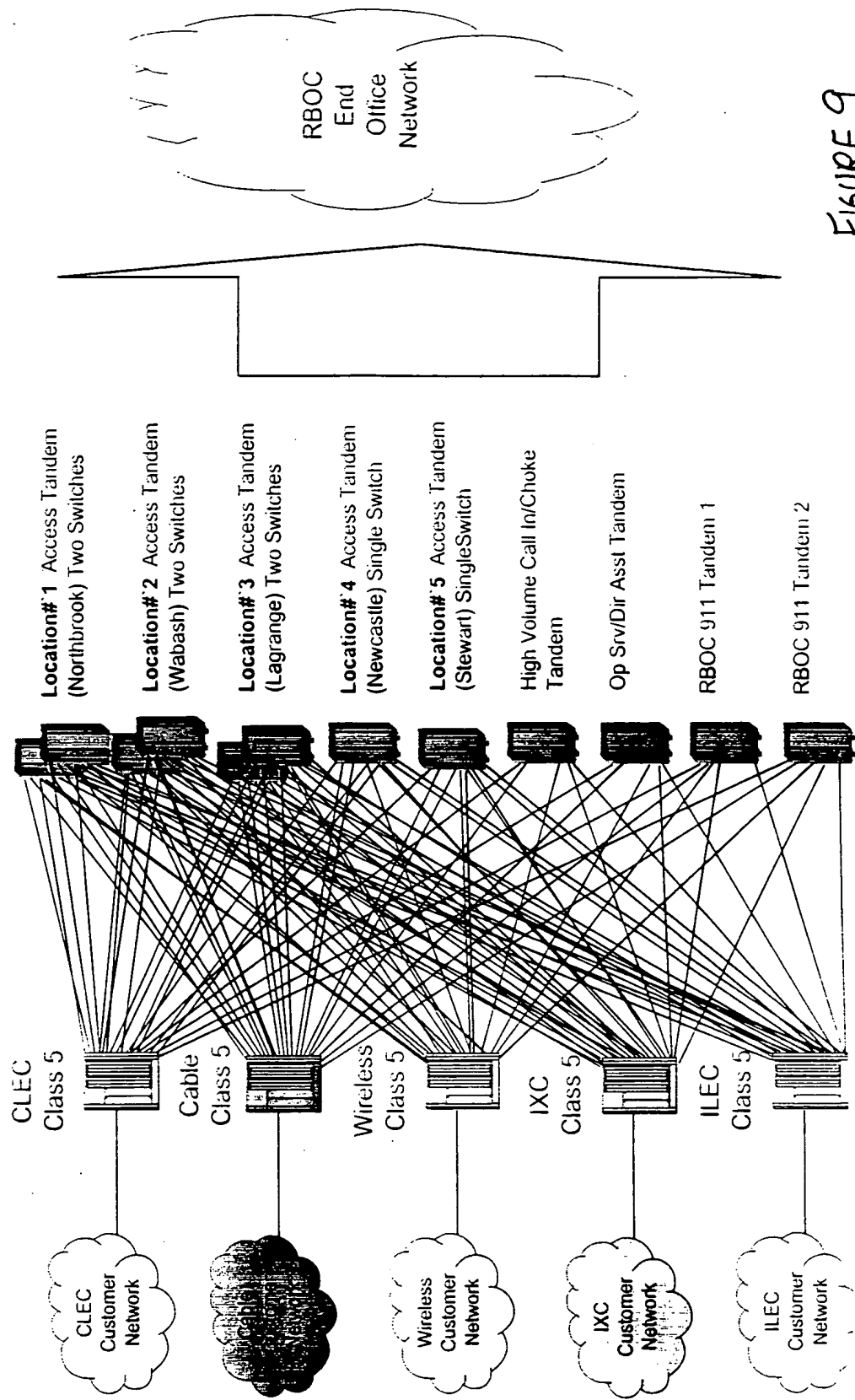


FIGURE 9

Prior Art

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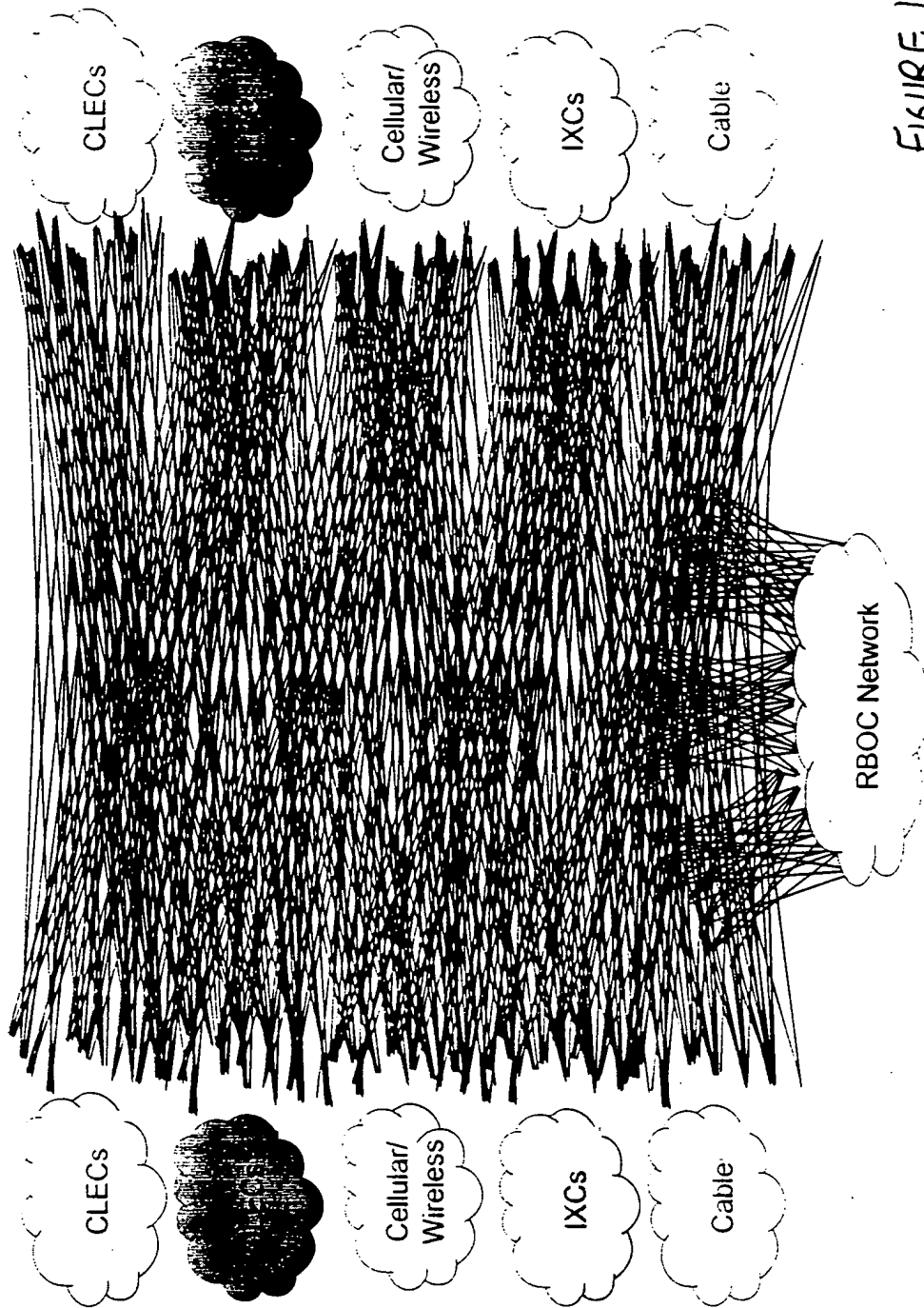


FIGURE 10

PRIOR ART

207050-635/8007

Ameritech LATA 357 Tandem Trunking Requirements

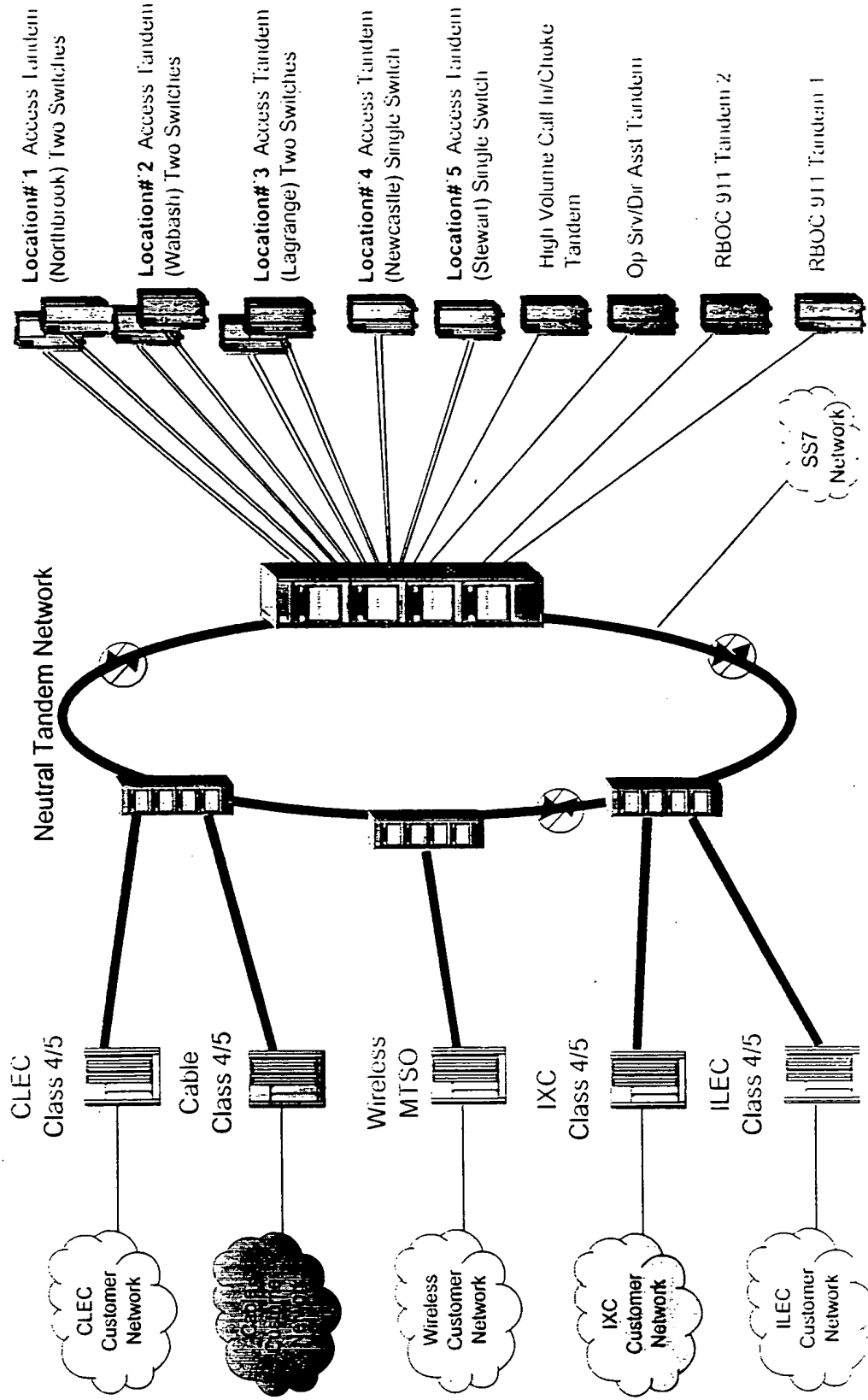
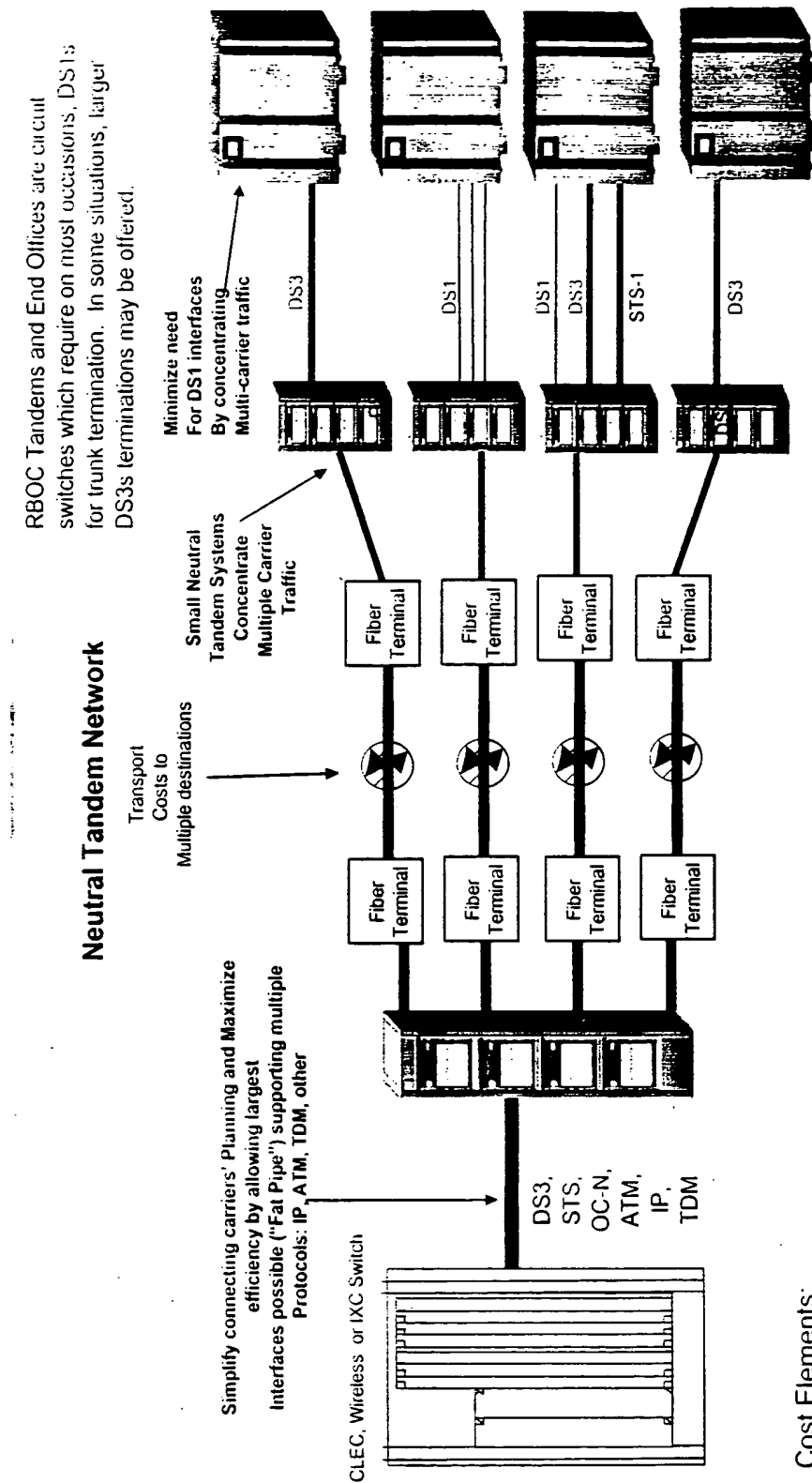


FIGURE 11



Cost Elements:

- NTN reduces connecting carriers' tandem transport to a single "Fat Pipe" to the Neutral Tandem Network. Neutral tandem will be located in convenient Carrier Hotels, Data Centers and Central Offices to minimize the need for carriers to be burdened by high transport costs. Protocols allow for the evolution of the Class 5 switch to the softswitch architecture of the future without the need to incorporate high cost TDM interfaces. NTN routes and terminates traffic at either the serving RBOC tandem or at the RBOC end offices depending on traffic type and efficiency

FIGURE 12

207050" 525/5200F

Ameritech LATA 357 Tandem Trunking Requirements

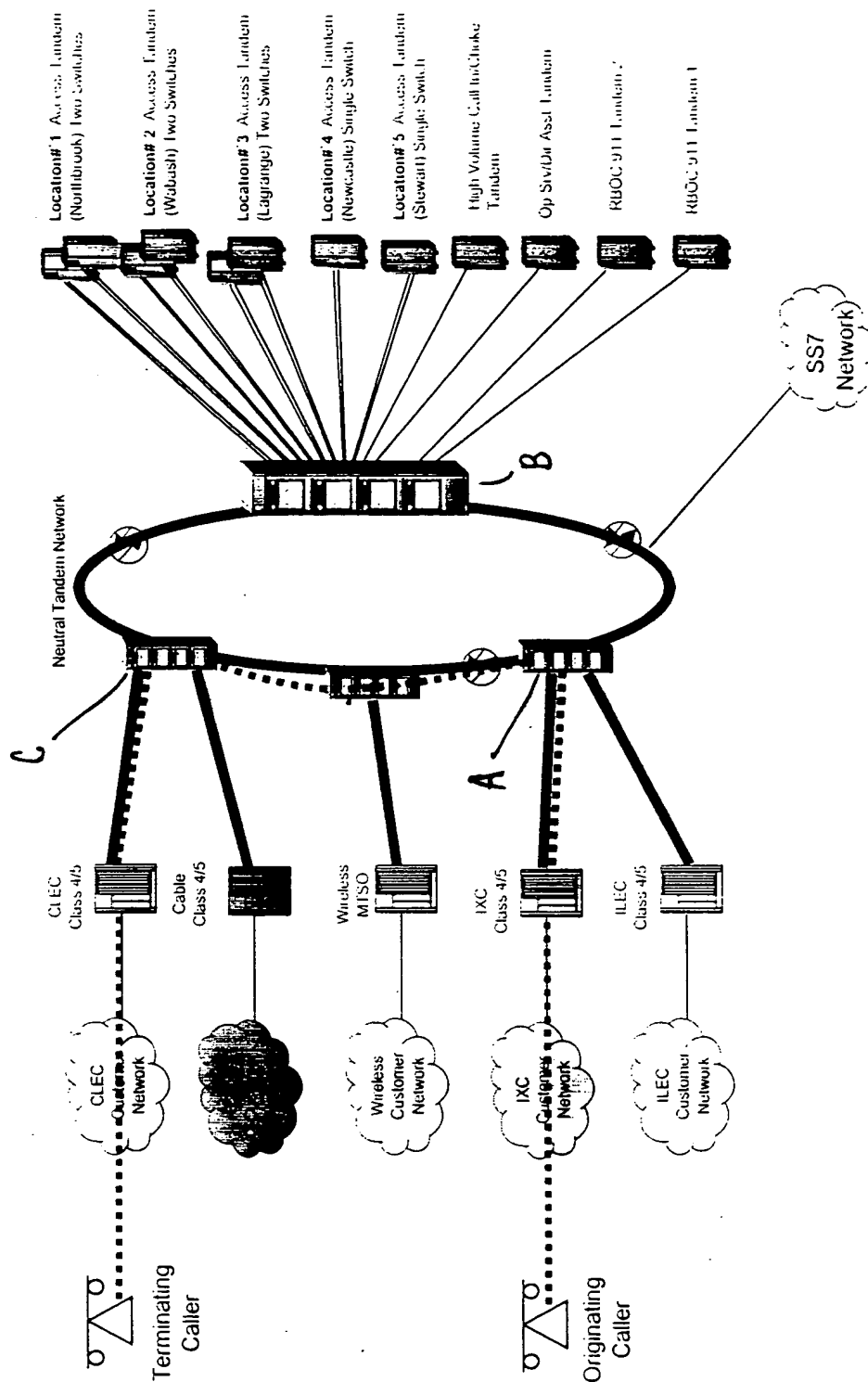


FIGURE 13

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Ameritech LATA 357 Tandem Trunking Requirements

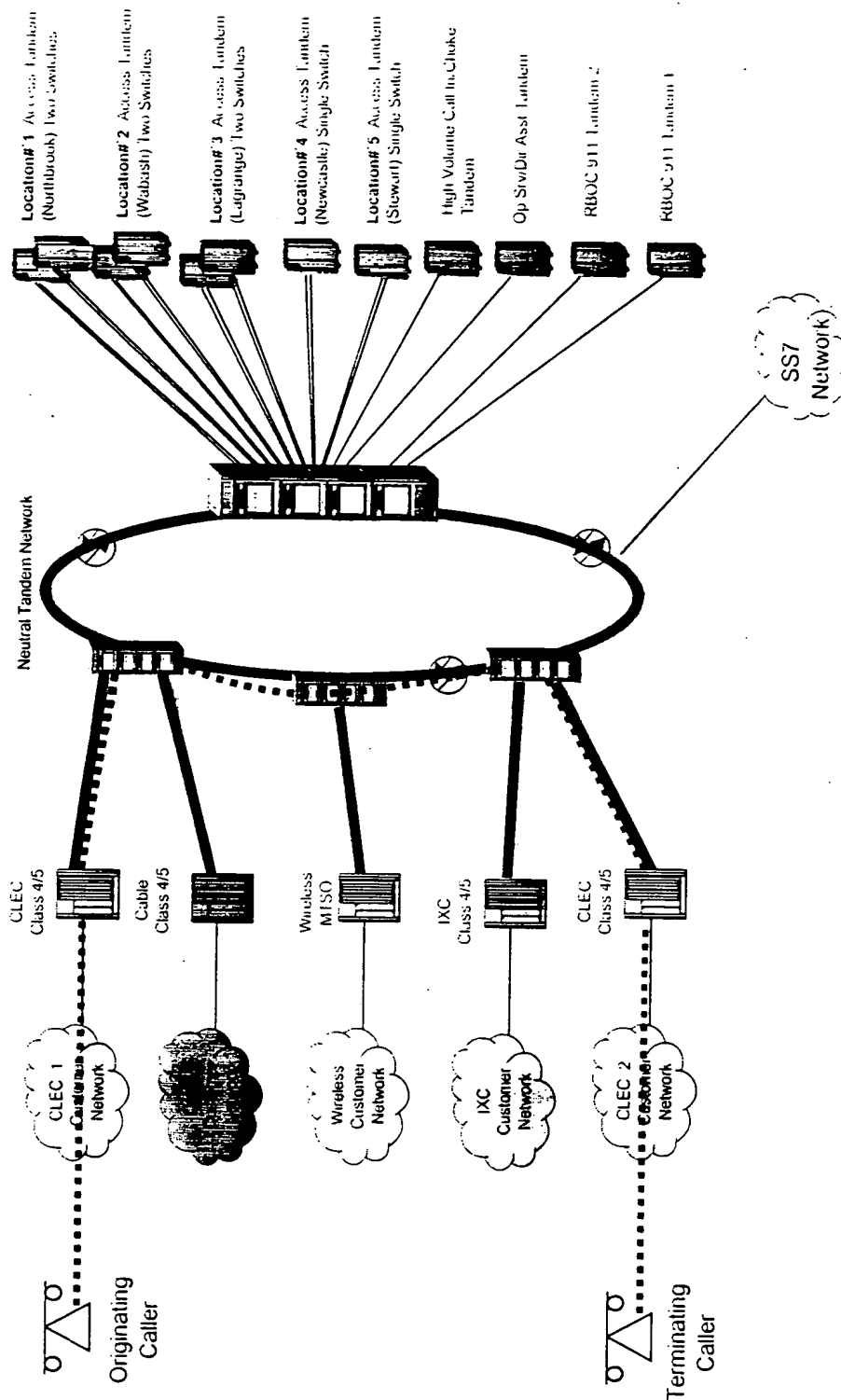


FIGURE 14

207050-525/800T

Ameritech LATA 357 Tandem Trunking Requirements

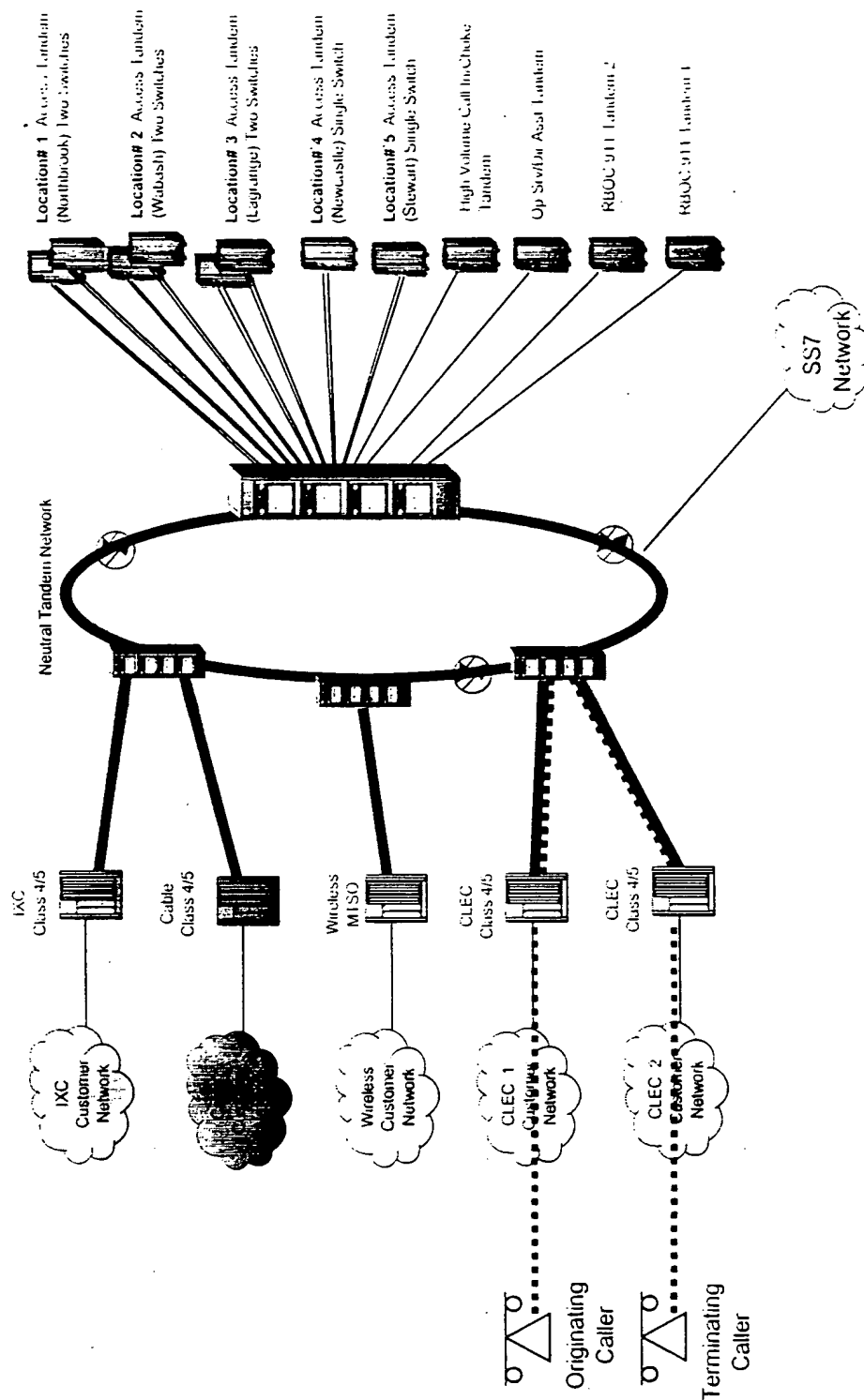


FIGURE 15

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Ameritech LATA 357 Tandem Trunking Requirements

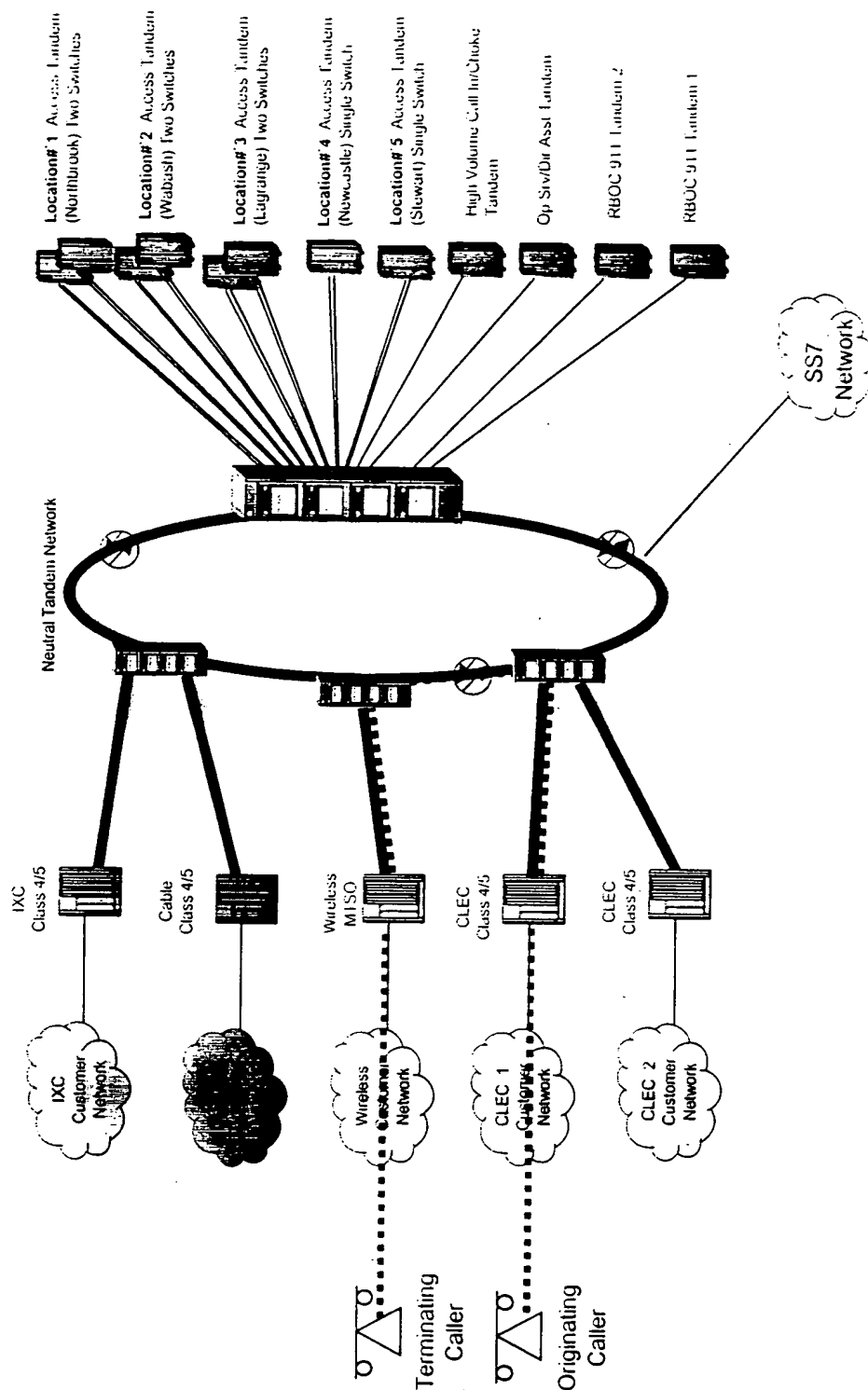


FIGURE 16

337050 555/8007

Ameritech LATA 357 Tandem Trunking Requirements

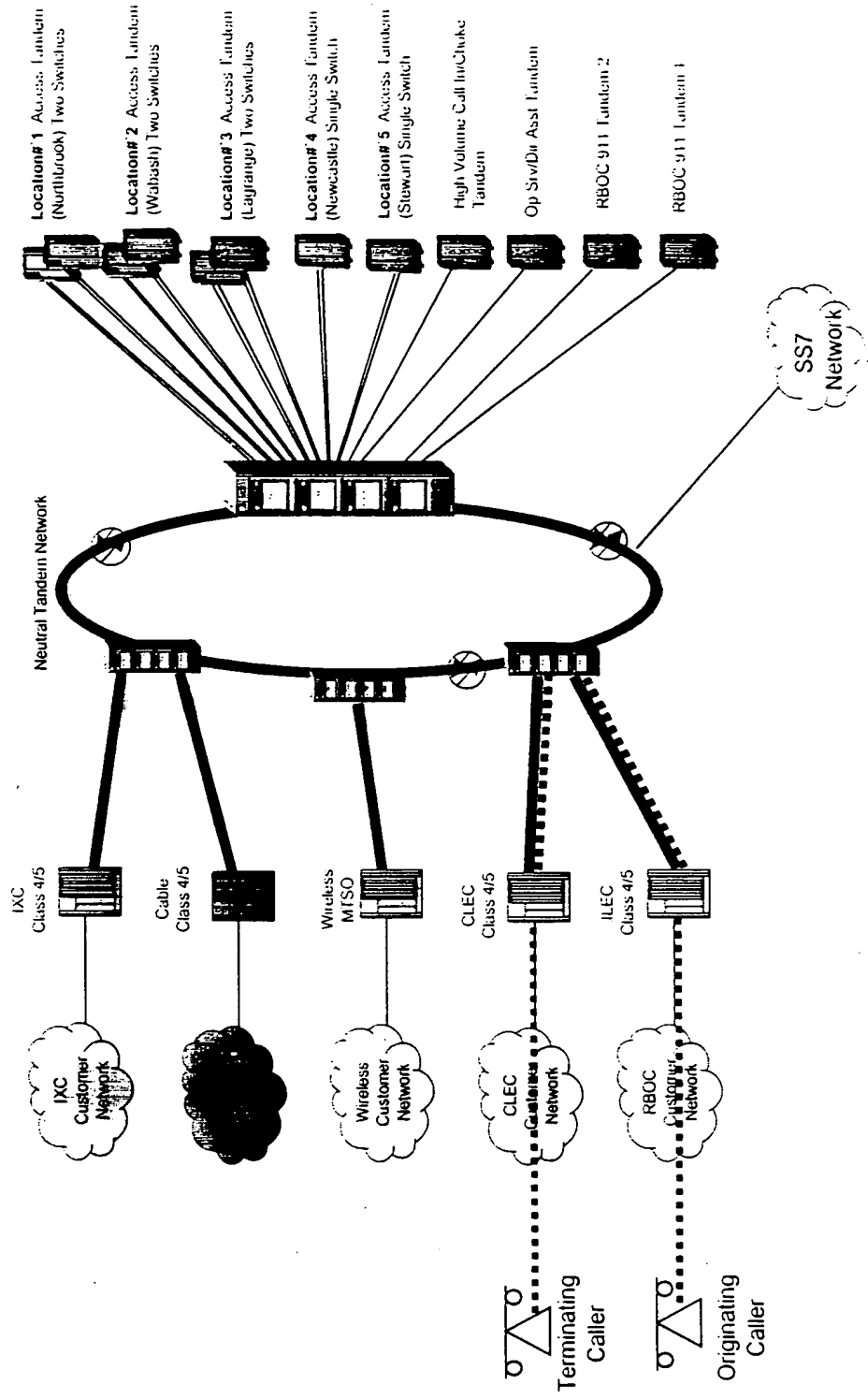


FIGURE 17

337050 " 595 / 8007

Ameritech LATA 357 Tandem Trunking Requirements

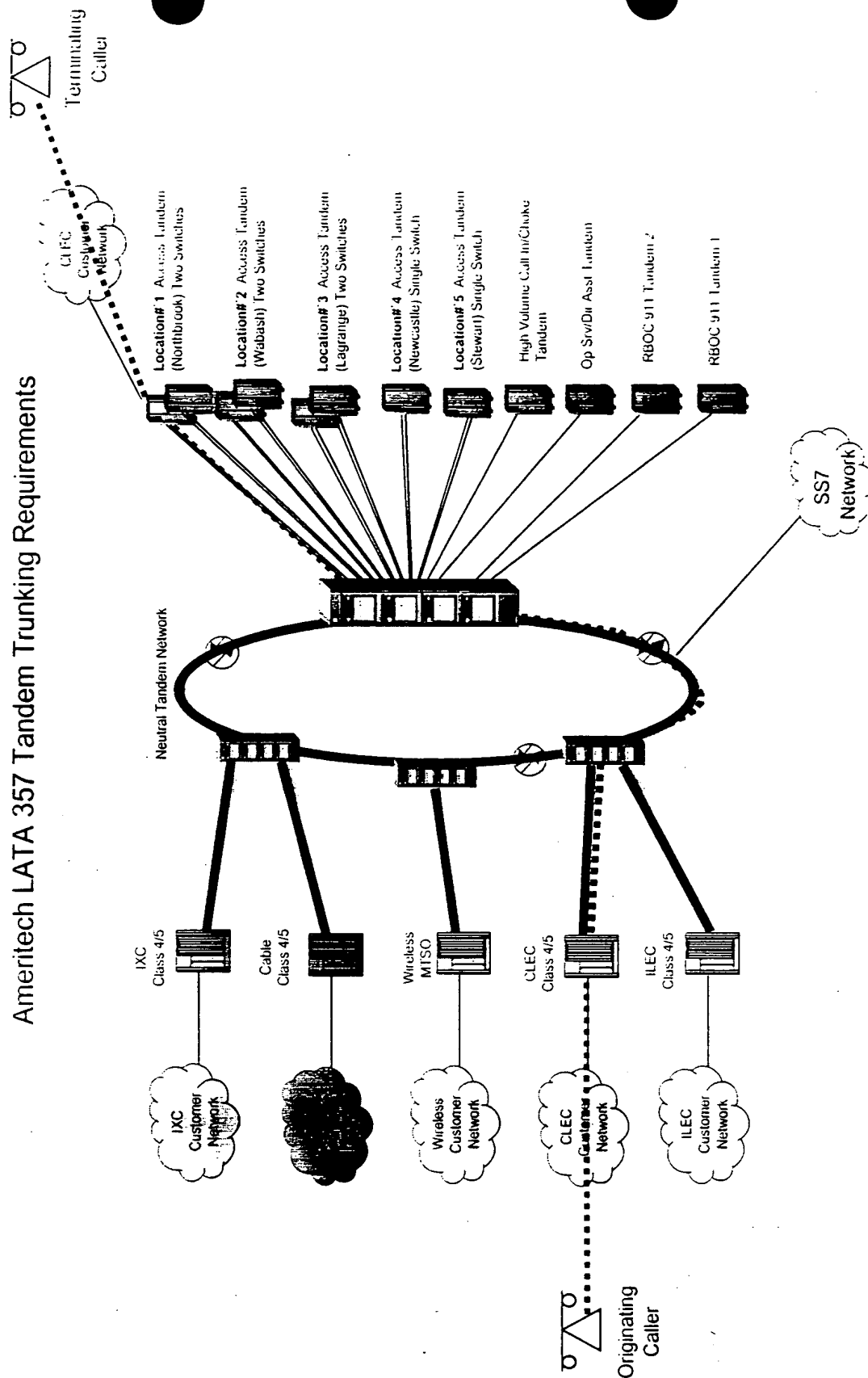


FIGURE 18

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Ameritech LATA 357 Tandem Trunking Requirements

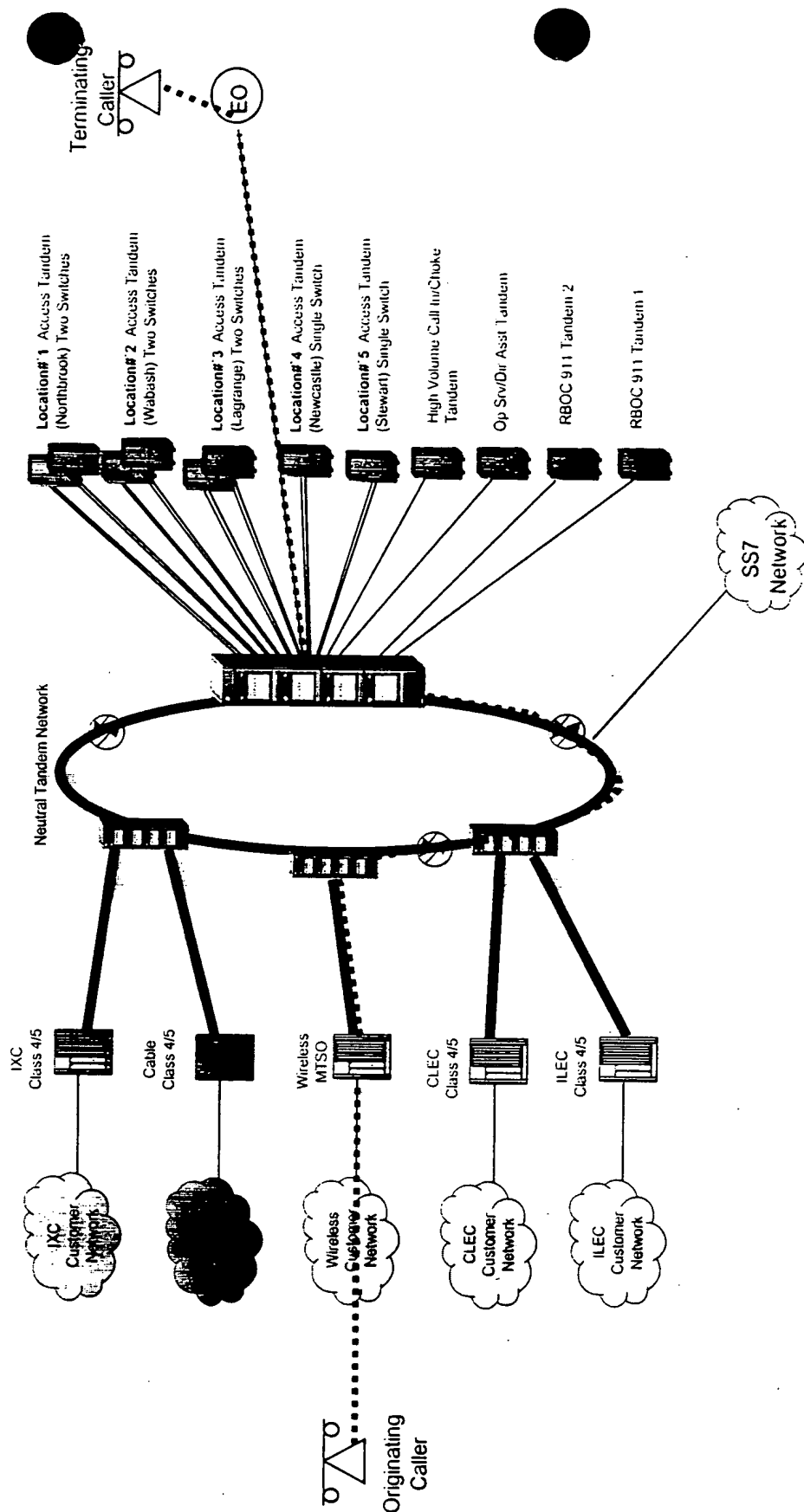


FIGURE 21

Ameritech LATA 357 Tandem Trunking Requirements

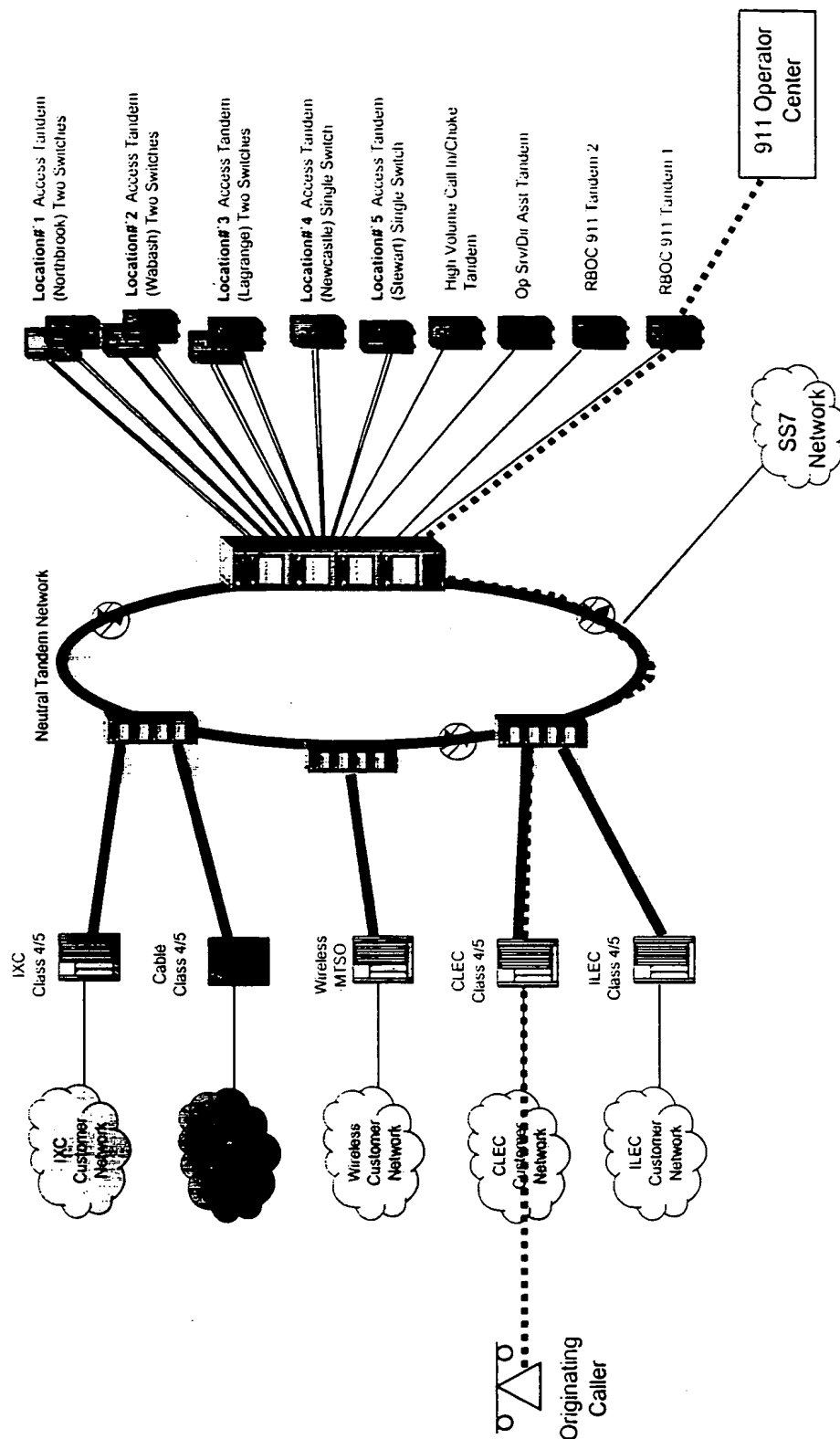


FIGURE 22

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Ameritech LATA 357 Tandem Trunking Requirements

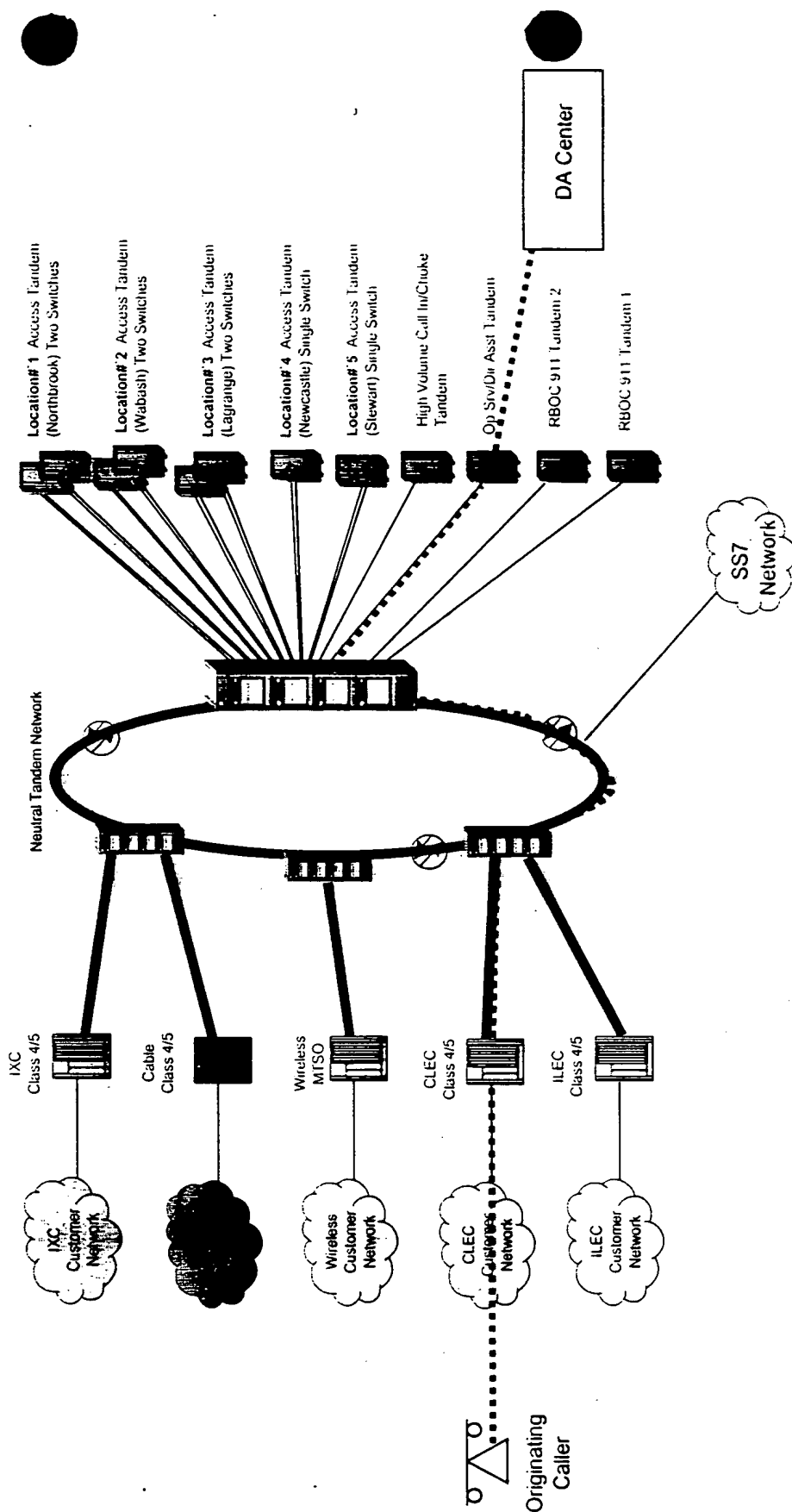


FIGURE 23